REMARKS/ARGUMENTS

The amendments and remarks set forth in the June 7, 2006 Reply, as well as the following remarks, are responsive to the points raised by the Office Action dated February 15, 2006 and the Advisory Action dated June 19, 2006. In view of these amendments and remarks, reconsideration is respectfully requested.

Claims 1-8 and 13 were provisionally rejected under the doctrine of obviousness-type double patenting as unpatentable over claims 64-66 and 73-75 of copending Application No. 10/926,321 to Sakurai et al.

Claim 1 was provisionally rejected under the doctrine of obviousness-type double patenting as unpatentable over claim 21 of copending Application No. 10/932,319 to Sakurai et al.

Because these double patenting rejections are only provisional, Applicants decline to address them here. The Advisory Action indicated that these double patenting rejections are still held in abeyance.

Claims 1-13 were rejected under 35 U.S.C. § 103 as unpatentable over JP 2002-060691 to Hayashi (hereinafter, "Hayashi") in view of JP 2001-098218 to Nobe (hereinafter, "Nobe").

This rejection is respectfully traversed.

According to the Advisory Action, the Reply filed June 7, 2006 does not place the application in condition for allowance because Nobe teaches polymerization at a temperature that is the same as the porogen removal temperature (i.e., 350°C) ([0036]-[0037]). The Advisory Action also alleged that unless the Applicants show the criticality of the porogen removal temperature being lower than the polymerization temperature, a porogen removal temperature of lower than 350°C is obvious.

A *prima facie* case of obviousness requires that all claim limitations be taught or suggested (MPEP § 2143). Amended independent claim 1 requires that the pore-forming agent be vaporized in a third heat treatment at a temperature that is *lower than* the temperature of the polymerization-promoting second heat treatment. Neither Nobe nor Hayashi, either alone or in combination, teaches or suggests vaporizing the pore-forming agent at a temperature that is lower than the temperature of the polymerization-promoting heat treatment. That Nobe may teach the polymerization at

a temperature that is the same as the porogen removal temperature is of no import because such a teaching does not read on a claim limitation requiring vaporization of the pore-former at a lower temperature than the polymerization temperature. Without any disclosure of overlapping temperature ranges, there can be no *prima facie* case of obviousness.

Moreover, a *prima facie* case of obviousness also requires that there be some teaching or motivation to modify the references to arrive at the claimed invention (MPEP § 2143). Neither Nobe nor Hayashi provides any teaching or suggestion to vaporize the pore-forming agent at a temperature that is lower than the polymerization temperature, as claimed. As explained above, vaporizing the pore-former at the same temperature as the polymerization temperature is not sufficient to teach or suggest vaporizing the pore-former at a temperature that is lower than the polymerization temperature.

Without an established *prima facie* case of obviousness, Applicants need not rebut the *prima facie* case of obviousness by showing the criticality of the claimed temperature. Nevertheless, the Applicants have already shown that the pore-former is vaporized at a temperature that is lower than the polymerization temperature, as claimed, to produce a highly reliable semiconductor device (specification, page 16, lines 12-16).

Since amended independent claim 1 is allowable for the reasons set forth above, the dependent claims are also allowable because they depend from allowable independent claim 1.

For the reasons set forth above, reconsideration is respectfully requested.

Respectfully submitted,

Stephanie M. Lawley

Stephanie M. Lawley, Reg. No. 55362
LEYDIG, VOIT & MAYER
700 Thirteenth Street, N.W., Suite 300
Washington, DC 20005-3960
(202) 737-6770 (telephone)
(202) 737-6776 (facsimile)

Date: July 7, 2006